# Decision

# Decision of Commission de Régulation de l'Energie [French Energy Regulatory Commission] dated December 17th, 2009 on RTE's investment programme for 2010

Participating in the deliberations were: Mr. Philippe de LADOUCETTE, chairman, Mr. Michel LAPEYRE, vice-chairman, Mr. Maurice MÉDA, vice-chairman, Mr. Jean-Paul AGHETTI, Mr. Eric DYEVRE and Mr. Emmanuel RODRIGUEZ, commissioners.

Pursuant to Article 14 of law No. 2000-108 of February 10<sup>th</sup>, 2000, amended, the public transmission system operator (RTE) submitted its 2010 investment programme to the Commission de Régulation de l'Energie (CRE) for approval.

#### 1. Context

1.1 *Article* 14 of the law of February 10<sup>th</sup>, 2000, amended by the law of December 7<sup>th</sup>, 2006, defines CRE's approval authority as follows:

"The public transmission system operator exploits and maintains the public electricity transmission grid. It is responsible for its development to allow the connection of producers, public distribution grids and consumers, as well as interconnection with the other grids. To this end it prepares an investment programme every year. This programme is subject to the approval of the Energy Regulatory Commission which ensures the provision of the necessary investments for the proper development of the grids and that access to them is transparent and non-discriminatory.

The Commission de Régulation de l'Energie can only refuse to approve the annual investment programme on grounds arising from the missions assigned to it by law."

1.2 Article 28 of the law of February 10<sup>th</sup>, 2000, amended by the law of December 7<sup>th</sup>, 2006, sets out the general missions assigned to CRE:

"In accordance with the areas of competence assigned to it, the Commission de Régulation de l'Energie contributes, for the benefit of the end consumers, to the proper functioning of the electricity and natural gas markets. In particular, it ensures that the conditions for access to the transmission and distribution systems of electricity and natural gas do not hinder the development of competition."

1.1 RTE operates and maintains the public electricity transmission grid. It is responsible for its development to allow the connection of producers, public distribution grids and consumers, as well as interconnection with the other grids. In the context of these missions, which are essential to the future needs of the community, RTE must, every year, establish its investment programme with a view to upholding performances and managing costs borne by the end consumers via the tariffs for use of the public electricity transmission network.



- 1.2 RTE is currently facing important challenges in carrying out its missions, relating to the development and the replacement of the grids:
  - Maintaining the level of security of supply in certain zones weakened by their low level of local generation and by the difficulties encountered in the acceptance of new electric infrastructures, which are nevertheless essential:
  - The many applications for connection of generation facilities, boosted by the resumption of an investment cycle and by the development of renewable energies initiated by the Energy Climate Plan:
  - The necessary integration of European electricity markets which stimulates the need to develop interconnection capacity;
  - A progressive increase in the need to renew facilities due to their ageing.
- 1.3 These issues require, for the coming decade, important investment in the public electricity transmission grid. The level of annual investments should reach, on average, 1192 M€ for the 2009-2012 period, representing an increase of 60 % compared with the 2006-2008 period. The investment programme proposed by RTE for 2010 amounts to 1116 M€ The progress made in terms of investments in the transmission network testifies to the efforts RTE is putting into solving these issues.
- 1.4 In its decision approving RTE's investment programme, CRE must ensure that the steps taken to develop and renew the transmission grid contribute to the proper functioning of the electricity markets, to the end consumer's advantage.
- 1.5 In particular, CRE remains attentive to the changes in the conditions for connection of new generation units, in a context of deep changes in the generation facilities. Indeed, these units are essential to maintain security of supply.
- 1.6 CRE also remains particularly attentive to projects aiming to improve security of supply in areas that are electrically fragile, such as the Provence-Alpes-Côte d'Azur (PACA) region and Brittany.

#### 2. Description of the investment programme presented by RTE for 2010

- 2.1 The proposed programme amounts to 1116.0 M€ for 2010, up 8.4 % over the programme for 2009, approved by CRE on December 18<sup>th</sup>, 2008 (1029.9 M€).
- 2.2 Investment expenditure relating to the development of the major transmission grid and the interconnection network amounts to 297.8 M€, up 37.9 % over the allowance for 2009 (215.9 M€). For 2010, 34 % of investment expenditure relating to major transmission projects is dedicated, in particular, to the creation of a double 400 kV Cotentin-Maine axis, aiming to insert a third group of electricity generation in Flamanville, to insert additional production facilities over the Fos-Lavéra zone, as well as to create the Morbihan's electric substation aimed at improving the security of electric supply to the South of Brittany. The expenditure dedicated to interconnections amounts to 67.4 M€ compared with 33.0 M€ for the 2009 programme.
- 2.3 Investment expenditure relating to renewing the major transmission network and the interconnections amounts to 60.8 M€, compared with 66.6 M€ for the 2009 programme.
- 2.4 The investment expenditure relating to the development of the regional grids amounts to 352.1 M€, up 8.4 % over the allowance for 2009 (324.9 M€). These investments relating to the development of regional grids are marked in 2010 by the take-off of two significant projects: the reinforcement of the 225 kV Cantegrit-Mouguerre line, improving security of supply to the Biarritz-Bayonne area, and the creation of a 225 kV step in Hyères, with the achievement of an underground 225 kV link between the Hyères and La Garde substations, aiming to secure the electric supply to the East of Toulon.
- 2.5 The investment expenditure for renewing the regional grids amounts to 260.0 M€, compared with 261.5 M€ for the 2009 programme.



- 2.6 The investment expenditure relating to the resumption of the transmission grids amounts to 2.6 M€ compared with 3.5 M€ in 2009 and corresponds, in part, to transfers of assets from ERDF to RTE.
- 2.7 The investment expenditure relating to information systems for the electric system amounts to 45.2 M€ compared with 76.3 M€ in 2009. This decrease of 40.8 % compared with 2009 results from the decrease in expenditure dedicated to the deployment of the fibre-optic grid, which is 22.7 M€ compared with 54.0 M€ in 2009.
- 2.8 The investment expenditure dedicated to information systems for management and the electricity market is 38.7 M€, compared with 42.8 M€ in 2009. The share dedicated to information systems to improve customer relationship management and the electricity market amounts to 17.8 M€ compared with 18.4 M€ in 2009.
- 2.9 The logistics investment expenditure amounts to 58.9 M€, compared with 38.3 M€ for the 2009 programme.

## 3. Comments by CRE

CRE makes the following comments on the investment programme submitted by RTE:

- 3.1 The primary goal of the investments in the major transmission grid is to reduce congestion and technical losses over the transmission grid. They also contribute to the safety of the electrical system, to securing supply for large pockets of consumption and to inserting generation facilities.
- 3.2 The implementation of short-term stop-gap measures following the non-completion of the Boutre-Broc Carros link will be finalised in 2010. These measures are essential to temporarily relieve some of the congestion on the grids in the PACA region, but are still not sufficient to guarantee secured supply to the region. In response to the region's electric fragility, RTE presented a series of measures, to be implemented by 2015, aiming to adapt the grid for better security of supply on the long-term. The extent of these measures will depend on the results of the actions for electricity demand management that will have been implemented locally.
- 3.3 Given the low level of local generation in Brittany, the region's electricity supply principally relies on remote generation sites, making the region an electric peninsula. The realisation of the Morbihan's 400/225 kV electric substation, by end 2010, will make it possible to improve the security of supply of the South of Brittany. However, ever more tense exploitation conditions (in particular in the North of Brittany), which are aggravated by the dynamic increase in the electricity consumption in the region, highlight the deterioration in the level of security of supply in Brittany and exposes the region to power cuts. Notwithstanding actions for managing electricity demand, that can sporadically lessen the increase in regional consumption, or the grid adaptations that might have been implemented, maintaining security of supply to Brittany still depends on the development of regional generation as well as on the perpetuation and availability of the existing generation facilities.
- 3.4 The investments in the development of interconnection infrastructures make it possible to raise the level of mutual back-up between electricity transmission grids and to fluidify energy exchanges at the borders, with a view to market integration. The investment expenditure dedicated to the interconnections is sharply increasing, which corresponds to projects being carried out (changing conductors for the Albertville-Cornier and France-Italy Optimisation projects) and to studies prior to the France-Spain interconnection via the East of the Pyrenees. The studies carried out by RTE on the France-England interconnection, in collaboration with its British counterpart, should make it possible to decide, in 2010, on investments aiming to increase interconnection capacity between France and England.



- 3.5 Despite the achievement of projects for new interconnection infrastructures, the level of energy exchanges at the borders still depends on the proper development of the national major transmission grid upstream. This is why CRE pays particular attention to identifying the investments to be realised on the grid upstream, without which the efforts put into developing the interconnection infrastructures would only lead to limited gains in terms of capacity for exchanges.
- 3.6 CRE remains attentive to the changes in the conditions for connection in the present context, which is marked by difficulties in completing new grid infrastructures within deadlines comparable to those of generation investments. To this effect, it is important that RTE pursue its efforts to identify which developments are necessary for the upstream grid to be able to integrate generation facilities in transparent and non-discriminatory conditions.
- 3.7 There seem to remain today heavy uncertainties on the effective volumes for operation of new generation facilities on the medium and long-term, as well as on where they should be located. These uncertainties have a significant impact on the nature and scale of congestion suffered on the transmission grid. In this context, RTE undertook a study, at CRE's request, aiming to show the evolution of these congestions based on different scenarios of implantation of these new generation facilities.
- 3.8 The public transmission grid of the North France zone is crossed by high energy flows related to generation in this zone and cross-border exchanges. Taking account of the changes in generation over this zone, RTE's analysis confirms, with the necessary details, the structuring congestions related to the insertion of generation projects that are underway. This analysis should thus in the short-term lead to the decision to invest correspondingly.
- 3.9 The primary goal of the investments for the development of the regional grids is the secured supply for regional pockets of consumption. They also contribute to the distribution of local generation. The significant increase in investment expenditure for the development of regional grids results from the accelerated reinforcement of the upstream grids and the multiplication of connection operations. This dynamic complies with the requirement for quality of service and non-discrimination incumbent on RTE with regard to grid users.
- 3.10 When presenting its investment programme, RTE committed, upon CRE's request, to reaching precise and quantified targets in terms of quality of service, reflecting the proper development of the grid. These commitments cover safeness of the electric system, security of supply, quality of supply, technical and economic efficiency, connection, and maintaining the grid in an operational condition.

## 4. Decision by CRE

4.1 CRE approves the 2010 investment programme submitted to it by RTE on November 17<sup>th</sup>, 2009:

2010	In millions of €
Major transmission and Interconnections – Development	297.8
Major transmission and Interconnections - Renewal	60.8
Regional grids - Development	352.1
Regional grids - Renewal	260.0
Resumption of Transmission grids	2.6
Information systems for the electric system	45.2
Information systems for management and electricity market	38.7
Logistics	58.9
Total	1116.0

4.2 CRE asks RTE to present, at the beginning of July 2010, an interim implementation review of this decision.



- 4.3 CRE asks RTE to present, when submitting the investment programme for 2011:
  - The results of the studies aiming to decide on investments to increase interconnection capacity between France and England;
  - A schedule for work relating to long-term improvement of quality of supply in the PACA region;
  - An information point on the evolution of security of supply in Brittany;
  - The results of the studies aiming to decide on investments in the upstream grid relating to the development of generation in the North of France;
  - The results of the study on the sensitivity of congestions appearing on the grid, depending on the volume and location of future generation facilities which are likely to become operational.

Signed in Paris, December 17<sup>th</sup>, 2009

For the Commission de régulation de l'énergie, Chairman

Philippe de Ladoucette

